

FIG. 1A

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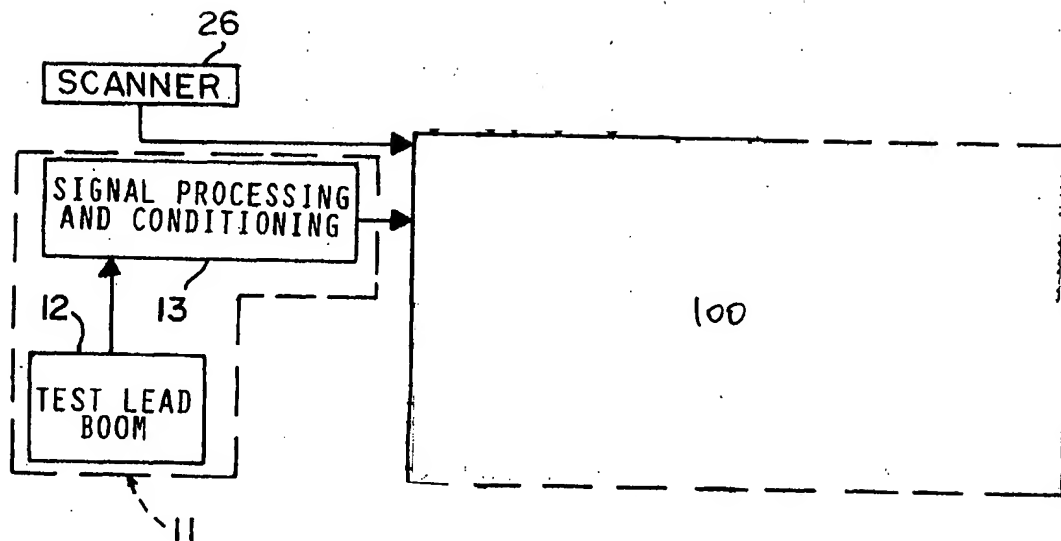


FIG. 10

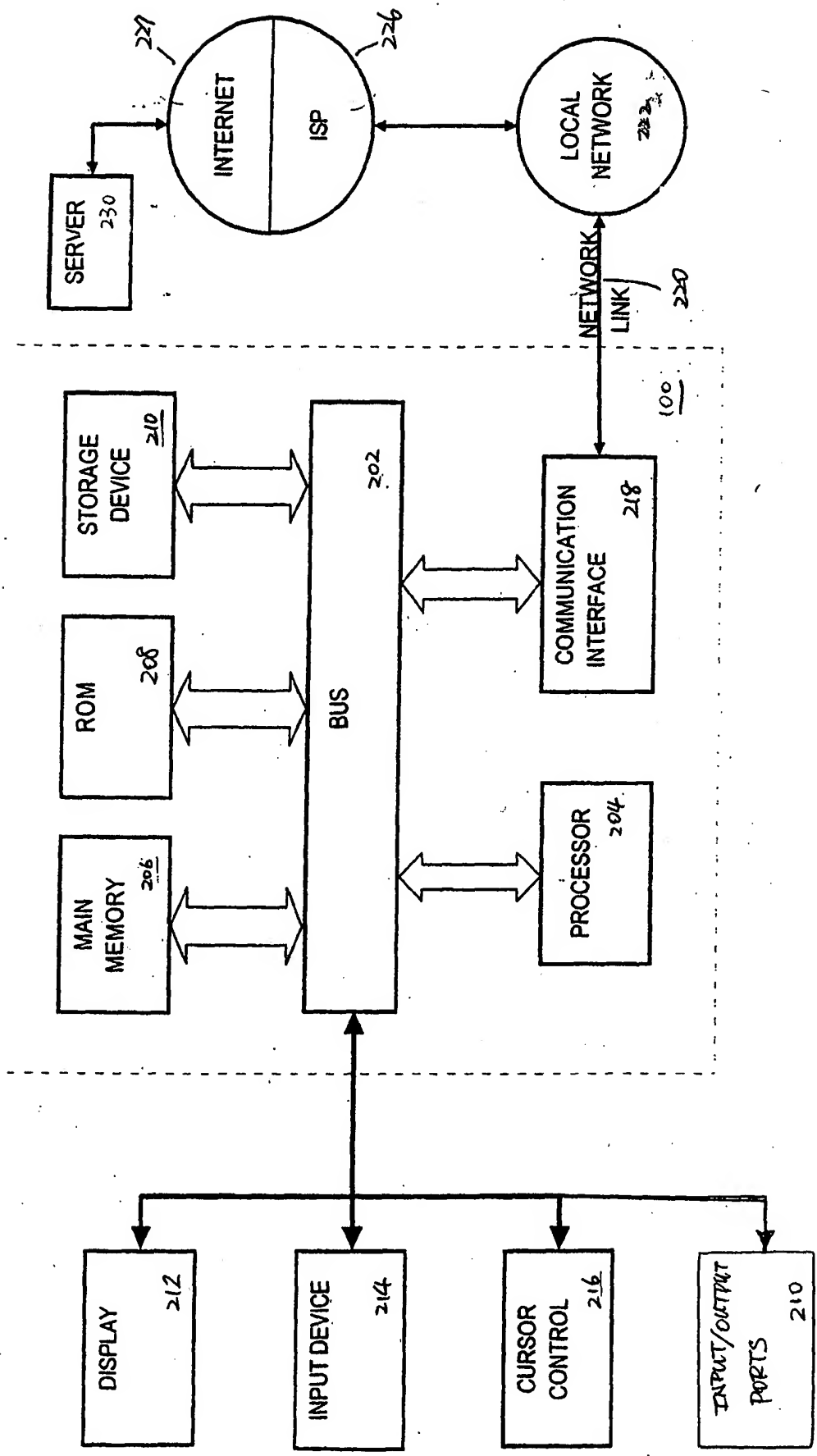


FIG. 1C

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VEHICLE
IDENTIFICATIONTEST
ANALYSIS

SYMPTOMS

SYMPTOM

BATTERY GOES DEAD
 NO START, NO OR SLOW CRANK
 NO START, CRANKS OK
 HARD START, SLOW CRANK
 HARD START, CRANKS OK
 ENG STARTS AND DIES
 ENG DIES AT IDLE/DECEL/BRKG
 ENG DIES AT ACCEL/CRUISE
 HESITATION/STUMBLD/SAG
 MISFIRE
 RUNS ROUGH
 IDLE SPEED LOW
 IDLE SPEED HIGH
 IDLE SPEED HUNTING
 LACK OF POWER/SLUGGISH
 SURGES/CHUGGLES
 POOR FUEL ECONOMY
 EXHAUST ODOR/BLACK SMOKE
 BACKFIRE THRU INTAKE/EXH

40

CAUSE

ACCESS VEHICLE FAULT CODES
 LEAKING SUPCHGR INTAKE GAS
 INJECTOR DRIVER/INJ FLOW
 VACUUM LEAK
 DEFECTIVE PCM BOARD
 EGR SYSTEM
 IAC CIRCUIT
 IGNITION SYSTEM
 MAF CIRCUIT
 GROUNDED OR BROKEN MOUNT
 THROTTLE BORE COKING
 TP CIRCUIT
 INCORRECT FUEL PRESS/VOLUME
 POOR FUEL QUALITY
 TCC WILL NOT DISENGAGE
 COMPRESSOR/VALVE TIMING

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TEST PROCEDURE

FAULT CODE RETRIEVAL
 QUICK TIP
 FUEL INJECTOR-MFI
 VACUUM LEAK
 QUICK TIP
 EGR
 IDLE AIR CONTROL SOLENOID
 ENGINE RUNNING-DIS AND MFI
 MASS AIR FLOW SENSOR
 QUICK TIP
 QUICK TIP
 THROTTLE POSITION SENSOR
 FUEL DELIVERY-MFI
 QUICK TIP
 QUICK TIP
 ENGINE MECHANICAL-DIS

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RANK

10
 8
 7
 5
 4
 4
 4
 4
 4
 4
 3
 3
 3
 2
 2
 2
 1

1993 PONTIAC BONNEVILLE 3.8 1

FIG. 2

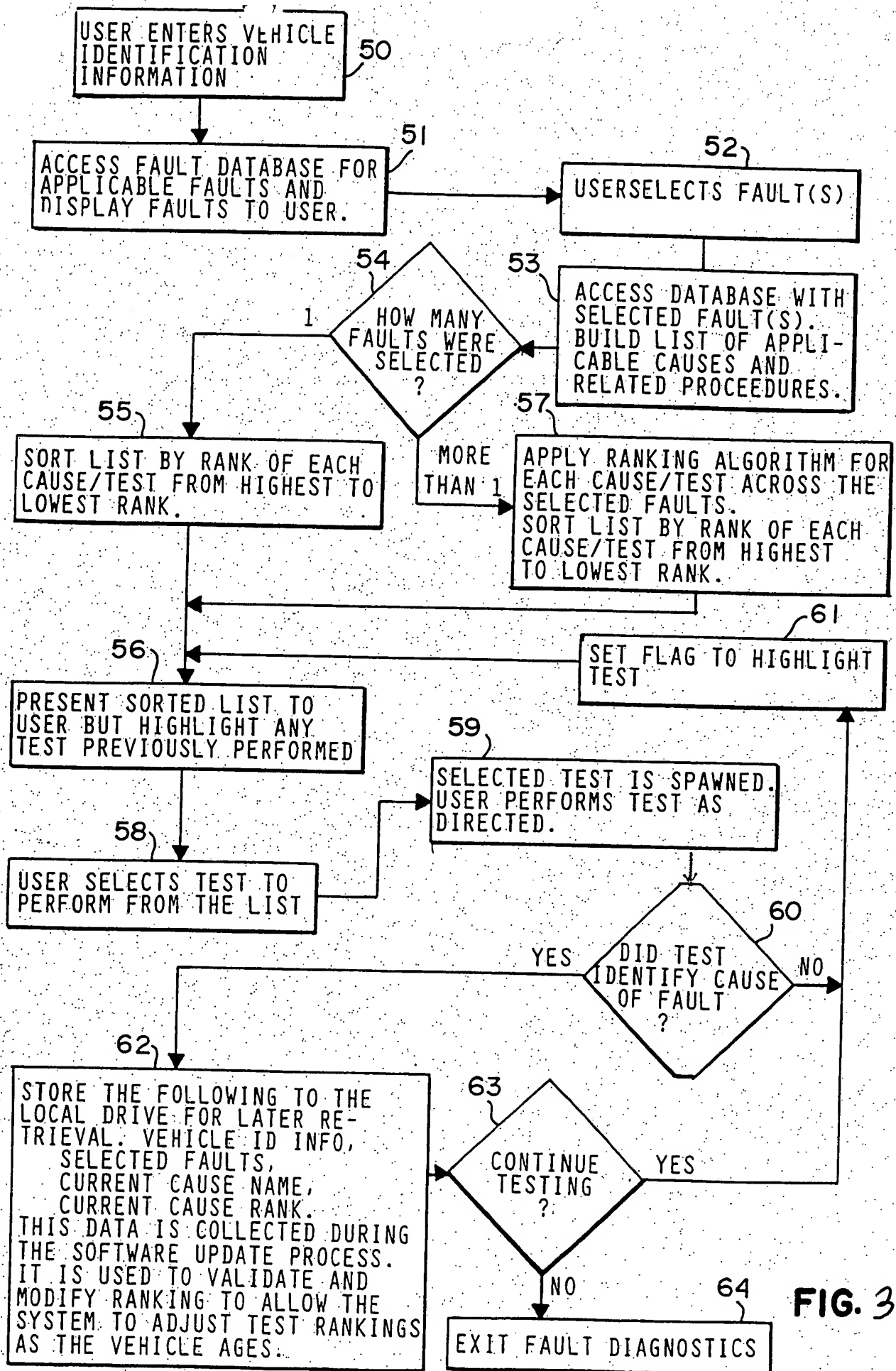


FIG. 3

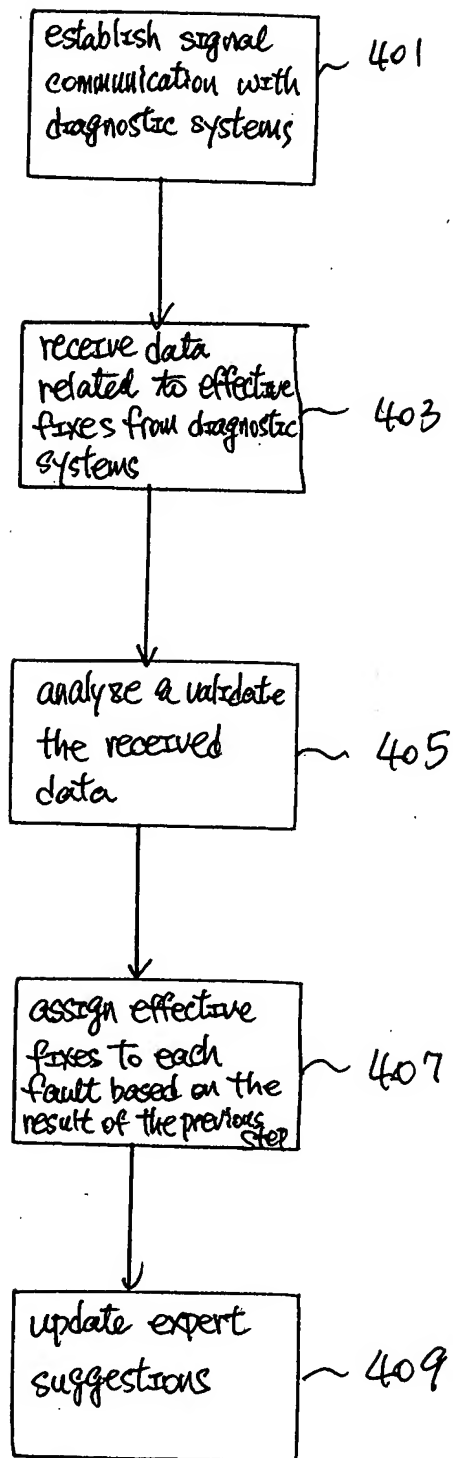


FIG. 4